The excessive rainfall of the north Pacific slope is a good illustration of the effect of the prevailing winds blowing off of a water surface. Naturally, then, the excessively dry periods at Boston are characterized by the west wind.

The sea breeze must be considered one of the minor factors in the climate of New England. This is a very shallow wind and frequently does not exceed 250 meters in depth as shown by pilot-balloon ascensions. It is easily distinguished from the "sea turn" by its more rapid decrease in temperature and also by the fact that it is more gusty. The "sea turn" is of cyclonic origin and is of much greater depth. The temperature drop which occurs with a thunderstorm is well known, but it is not nearly so marked a drop as occurs with the incoming of the sea breeze.

From observations with kites, sounding balloons, pilot balloons, and clouds it appears that about 90 per cent of the time the wind speed increases up to the base of the stratosphere. Occasionally the speed does decrease with altitude, but this generally occurs when there is a strong surface wind, from the north and northwest, after the passage of a storm out the St. Lawrence Valley.

The discussion of the winds at Boston is concluded with a discussion of the theories of circulation and of cyclonic origin and structure.—*C. L. M.*

PAMPHLET ON MARINE WORK.

The Weather Bureau has recently published a pamphlet (W. B. No. 678, "The Marine Meteorological Service of the United States") descriptive of its marine work, the object being to direct attention to this particular branch of the bureau's activities and the existing need for more weather and water-temperature observations from ocean-going ships. Chapters are devoted to the following subjects: History of American Marine Meteorology, the Present Commercial Value of Marine Meteorological Work, Some Specific Needs for More Marine Observations, Marine Observations in Daily and Seasonal Weather Forecasts, Observations and Instruments.

During the war comparatively few ships' observations were collected and the marine work suffered accordingly. The termination of hostilities, however, permitted of steps being taken to build up the observational part of the work and the revival of the American merchant marine has directed attention to, and quickened interest in, the whole subject of ocean meteorology.

Copies of the pamphlet will be sent to any address on request.

REVIVAL IN MARINE WORK.

A compilation which has just been made shows that since March last, some 357 ships have indicated a willingness to furnish reports to the Bureau. Some of these ships rendered reports prior to the war. Below is given by nationalities, the present number of observing ships and the recent additions thereto.

Nationality.	Present number of reporting vessels.	Number secured since March, 1919.
American	588	194
British	526	87
Japanese	133	17
Dutch	127	12
French	63	10
Italian	55	16
Danish	43	.....
Norwegian	40	5
Spanish	25	2
Belgian	19	6
Swedish	11	2
Russian	8	.....
Honduran	4	.....
Chinese	4	3
Brazilian	2	1
Portuguese	2	1
Chilian	1	1
Argentinian	1	.....
Interallied	1	1
Total	1,653	357

F. G. Tingley.

BIBLIOGRAPHY.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Professor in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Agius, Thomas.

The investigation of the air. A lecture delivered in the Aula Magna of the Malta university on the 19th of May, 1919. Malta, 1919. 29 p. 25 cm.

Bigourdan, G[uillaume]

La température moyenne des diverses parties de la France. charts. tables. 15½ cm. (Excerpted from Annuaire pour l'an 1912, publié par le Bureau des longitudes, Paris. p. A1–A47.)

Clayton, H[enry] H[elm]

Commerce and the weather. Buenos Aires. 1918. 14 p. 18 cm.

Davison, Charles.

The sound-waves and other air-waves of the East London explosion of January 19, 1917. Edinburgh. 1818. cover-title. 3 maps. 25½ cm. (Reprint from the Proceedings of the Royal Society of Edinburgh. Session 1917–1918. Vol. 38, part 2, no. 12, p. [115]–129.)

Dorno, C[arl Wilhelm Max]

Beobachtungen der Dämmerung und von Ringerscheinungen um die Sonne 1911 bis 1917. Berlin. 1917. 2 p. l., 94 p. tables (part. fold.) 34 cm. (Veröffentlichungen des K. Preussischen meteorologischen Instituts. Nr. 295. Abhandlungen Bd. 5. Nr. 5.)

Domo, C[arl Wilhelm Max]—Continued.

Himmelshelligkeit, Himmelspolarisation und Sonnenintensität in Davos 1911 bis 1918. Braunschweig. 1919. cover-title. charts. tables. 29½ cm. (Sonderabdruck aus "Meteorologische Zeitschrift," 36 Band, Heft 5/6 und 7/8, p. [109]–124; [181]–192.)

Die Physik der Sonnenstrahlung. charts. tables. 26½ cm. (Sonderabdruck aus Handbuch der Balneologie, medizinischen Klimatologie und Balneographie, Leipzig, Band 1. p. [504]–533.)

Dover, John.

Totland Bay, Isle of Wight. Report of meteorological observations for the year 1918, with extremes & averages for preceding years. 19th year of issue. Newport, Isle of Wight. [1919] 24 p. incl. tables. 25 cm.

Freybe, O[tto]

Methodik des wetterkundlichen Unterrichts. 6 Vorträge mit Anhang. Berlin. [pref. 1914] 2 pl., 135 p. front. (fold. chart) illus. charts. (part. fold.) 24 cm.

Horton, Robert E[lmer]

Some broader aspects of rain intensities in relation to storm sewer design. 12 p. 16 charts. 3 tables. 29½ cm. (Reprinted from Municipal and county engineering, June–July, 1919.)

International meteorological committee.

Minutes of a meeting of members held at the Meteorological office, London, on July 3rd to 9th, 1919, by invitation of the director of the Meteorological office, president of the Committee. London. 1919. 42 p. 24½ cm. M. O. 237.